## Abstract

The control method of arranging carbon nanotubes selectively orientationally on the surface of a substrate relates to the field of nano-technology. The invention includes: a) treating the solid substrate to be hydrophilic or hydrophobic; b) attaching the organic macromolecular with hydrophilic and hydrophobic end to the surface of the purified carbon nanotubes, and dissolving those carbon nanotubes into water or a solvent; c) spreading the above solution onto the surface of water in sub-phase by controlling the surface pressure-area isotherm of the carbon nanotube film on the water surface after volatilization of water or the organic solvent; d) transferring the formed carbon nanotube film to the above treated solid substrate surface to form the arrangement layer of the carbon nanotubes. This invention possesses substantial characteristics and notable improvement. The present invention can control the arrangement direction of the carbon nanotubes and can successively remove organic molecule.